

Claims

[1] A medical device for treating prostate diseases, comprising:

a cylindrical probe housing having a massaging section which is formed at an upper part of the probe housing and inclined forward, and an anus support section which is formed at a lower part of the probe housing and has a diameter smaller than that of the massaging section;

a base member having one end which is defined with a hole in which a lower end of the probe housing is inserted to be supported by the base member in a longitudinal direction and the other end in which electric lines connected to a power source and a controller are installed;

a light emitting member having a plate which is installed in the probe housing to extend in the longitudinal direction and a plurality of light emitting diodes which are attached to a front surface of the plate to emit near-infrared rays; and a vibrating member fixedly installed in the probe housing.

[2] The medical device as set forth in claim 1, wherein the probe housing comprises a front plate element and a rear plate element which are coupled to each other in the longitudinal direction, the front plate element being made of transparent or semi-transparent synthetic resin and the rear plate element being made of opaque synthetic resin.

[3] The medical device as set forth in claim 1, wherein at least 90% of the light emitting diodes of the light emitting member emit near-infrared rays having a wavelength range of 830-930 nm, and the remaining at most 10% of the light emitting diodes emit red visible rays.

[4] A medical device for treating prostate diseases, comprising :

a probe mechanism used in a state in which it is inserted through an anus, and a pad mechanism used in a state in which it is brought into contact with a perineal region, the probe mechanism comprising a cylindrical probe housing having a massaging section which is formed at an upper part of the probe housing and inclined forward and an anus support section which is formed at a lower part of the probe housing and has a diameter smaller than that of the massaging section;

a base member having one end which is defined with a hole in which a lower end of the probe housing is inserted to be supported by the base member in a longitudinal direction

and the other end in which electric lines connected to a power source and a controller are installed; a light emitting member having a plate which is installed in the probe housing to extend in the longitudinal direction and a plurality of light emitting diodes which are attached to a front surface of the plate to emit near-infrared rays; and a vibrating member fixedly installed in the probe housing; and the pad mechanism comprising an upper plate member having an anus massaging section, a perineal region massaging section and a heat-insulating section which are sequentially formed as rounded projections; a lower plate member coupled to the upper plate member and having one end in which electric lines connected to a power source and a controller are installed; a light emitting member having a plate which is installed on the lower plate member to be positioned below the anus massaging section and the perineal region massaging section of the upper plate member and a plurality of light emitting diodes which are attached to an upper surface of the plate to emit red visible rays; heat-insulating filler filled in a space defined between the heat-insulating section of the upper plate member and the lower plate member ; and a vibrator fixedly installed between the upper and lower plate members.

[5] The medical device as set forth in claim 4, wherein at least 90% of the light emitting diodes of the probe mechanism emit near-infrared rays having a wavelength range of 830-930 nm, at least 90% of the light emitting diodes of the pad mechanism emit red visible rays having a wavelength range of 600-700 nm, and the remaining at most 10% of the light emitting diodes of the probe and pad mechanisms emit near-infrared rays and/or red visible rays.

[6] A probe condom for a medical device for treating prostate diseases, wherein the probe condom is worn as a disposable over a probe mechanism for rendering a hyperthermia or performing a massaging function when inserting the probe mechanism into the rectum to treat prostate-related diseases, the probe condom being made of resilient latex material and applied on a surface thereof with a lubricant.

[7] The probe condom as set forth in claim 6, wherein the lubricant includes an aloe extract.